interorbital bars, continued below the eye, the anterior edge of the eye corresponding to the posterior part of the first bar. Hab. China.

In the British Museum three specimens, 305 to 780 mm. in total length.

# 4. Cestracion amboinensis.

Heterodontus zebra (non Gray), Bleek. Act. Soc. Sc. Neerland. i. 1856, Amboyna, p. 71.

Cestracion philippi (part.), Günth. Cat. Fish. viii. p. 415 (1870). Cestracion amboinensis, Regan, Ann. & Mag. Nat. Hist. (7) xviii. 1906, p. 436.

Dorsal fins more elevated than in any other species. Crossbars narrower and separated by wider interspaces than in *C. zebra* and each split into two. Anterior edge of first interorbital bar corresponding to anterior edge of eye.

Hab. Amboyna.

In the British Museum one specimen, type of the species, 580 mm. in total length.

# LXXX.—Additions to the Hymenopterous Genera Myzine and Plesia. By ROWLAND E. TURNER, F.Z.S., F.E.S.

The genera Myzine and Plesia, though differing widely in the female sex, are not distinguishable with any certainty in the males, though those species in which the basal segment of the abdomen is very long and slender or nodose towards the apex may be referred with certainty to Plesia, and those in which it is very short and as broad as the second, almost sessile, are equally certainly the males of Myzine. The genus Myzine does not occur in America, and there is little difficulty in distinguishing the males of the Asiatic species; but in South Africa, where both genera occur plentifully, some of the males cannot be assigned to either group with any confidence. The length of the basal joint of the posterior tarsi is no certain guide, as Saussure, who suggests that some use may be made of that character, recognizes.

The two genera are most strongly represented in Africa, but the species of *Plesia* are fairly numerous in America, and *Myzine* is well represented in the Mediterranean fauna and in Western Asia. No species of either genus is recorded from the Australian or Austro-Malayan regions; for *Myzine* 

tenuicornis, Sm., described from Aru, is a Thynnus, coming near the subgenus Aeolothynnus, Ashmead.

The species described in the present paper are mostly from

specimens in the British Museum collection.

# Myzine diffinis, sp. n.

3. Mandibles with a fringe of fine white pubescence on the outer margin near the base; the clypeus truncate broadly at the apex and sparsely punctured. Head rather small, rounded and narrowed behind the eyes, the vertex finely punctured, the front rugose; eyes broadly and shallowly emarginate, ocelli rather large; front between the antennæ prominent and transverse. Antennæ as long as the six basal segments of the abdomen, much more slender than is usual in the genus; the scape short, very little longer than the second joint of the flagellum; the first joint of the flagellum concealed by the scape, the second a little more than half as long as the third. Thorax rather closely punctured, the anterior margin of the pronotum transverse, with long greyish pubescence, the posterior margin almost smooth; the scutellum shining and sparsely punctured; propleura finely and sparsely, mesopleuræ coarsely punctured. Median segment short and transversely rugose. Abdomen shining and very sparsely punctured, with very sparse, short, grey pubescence; longer than the head, thorax, and median segment combined, the spine of the hypopygium only feebly recurved. The posterior tibiæ are nearly as long as the two basal joints of the tarsi combined. The neuration does not extend quite to the outer margin of the wing; the stigma is large, long, and straight; the radial cell broad, extending far beyond the third cubital cell and rounded at the apex; the second cubital cell half as long again as the third on the radial nervure and more than half as long again as the third on the cubital nervure; the first recurrent nervure is received at the middle of the second cubital cell, the second at the middle of the third. The second transverse cubital nervure is straight, the third oblique and slightly curved outwardly; the third cubital cell is much higher than its length on the cubital nervure and very short on the radial nervure.

Black; the mandibles (except at the apex), clypeus, the apex of the interantennal prominence, the anterior margin of the pronotum narrowly, the posterior margin broadly, a transverse mark near the middle of the mesonotum, the tegulæ, a vertical line on the mesopleuræ in front, a narrow band (broadened in the middle and again more strongly on

the sides) on the apical margin of the first six abdominal segments, a small spot on each side of the epipygium at the apical angles, the anterior tibiæ and tarsi in front, and the base of the intermediate and posterior tibiæ pale yellow; the apex of the mandibles and the legs pale dull ferruginous; the antennæ fusco-ferruginous, paler towards the apex. Wings hyaline, nervures black, the stigma ferruginous.

Length 7 mm.

Hab. St. Vincent, Cape Verde Islands ('Challenger' Expedition).

Type in B. M.

The difference from typical Myzine in the neuration and antennæ is marked, showing some approach to Iswara, but the occili are only very slightly enlarged. In the slender form it resembles Plesia rather than Myzine, the basal segment of the abdomen being somewhat longer and flatter, with a longer petiole than in typical Myzine.

# Myzine (Pseudomeria) perornata, sp. n.

2. Mandibles smooth and shining, with a shallow groove near the inner margin and a very feeble tooth on the inner margin near the apex, the outer margin fringed with sparse ferruginous hairs. Clypeus transverse and extremely short; head smooth and shining, quadrilateral, nearly half as broad again as long, the front produced over the base of the antennæ, forming a broad feebly bilobed prominence. Antennæ smooth, the scape alone with a few fulvous hairs beneath. shining and impunctate; the first joint of the flagellum narrowed at the base, the second joint fully half as long again as the first. Eyes oblique; the posterior ocelli very small, placed nearer to each other than to the posterior margin of the head. Thorax and propleure smooth and shining; the pronotum nearly as long as broad, rounded at the anterior angles, with a few setigerous punctures along the lateral margins; mesonotum with two longitudinal sulei on each side, very short, not more than one-third of the length of the pronotum; the scutellum as long as the mesonotum; mesopleuræ sparsely punctured. Median segment shining at the base, with a median longitudinal sulcus finely crenulate at the posterior angles, longer than the mesonotum, truncate posteriorly and transversely striated on the surface of the truncation; the sides of the segment concave and finely obliquely striated. Abdomen shining, very sparsely punctured; the petiole of the basal segment a little longer than broad, the apical segment almost impunctate, with a very short longitudinal sulcus before the narrowly rounded apex. The wings when folded only reach to the apex of the second abdominal segment and the stigma is situated halfway

between the base and the apex.

Head and thorax ferruginous red; the antennæ, prosternum, and anterior legs fusco-ferruginous; median segment, mesopleuræ, mesosternum, third, fourth, and fifth dorsal segments of the abdomen, and the intermediate and posterior legs black; the two apical joints of the tarsi and the base of the second and third joints testaceous; the first and second abdominal segments bright ferruginous, the ventral segments darker, the sixth dorsal segment black at the base, dark ferruginous at the apex; a spot on each side of segments 2–5 yellowish white. Wings pale fusco-hyaline; nervures fuscous.

Length 9 mm.

Hab. Piet Retief, Transvaal (R. Crawshay); November.

Type in B. M.

The wings are rather longer than in Pseudomeria graca and the stigma further from the base, owing to the greater length of the basal cells. The pronotum is also longer than in P. graca. The wings are less deeply bilobed, so that the species shows a transition between Pseudomeria and Hemimeria.

#### Myzine (Hemimeria) sublevis, sp. n.

2. Mandibles acute at the apex, with a groove on the inner margin not reaching the apex, the outer margin with a fringe of fulvous hairs. Clypeus transverse; the head smooth and shining, the front round the base of the antennæ strongly punctured and sparsely clothed with long fulvous hairs, three large setigerous punctures close to the summit of each eye. Posterior ocelli a little further from each other than from the eyes or from the posterior margin of the head. Pronotum narrower than the head, broadened posteriorly, sparsely punctured anteriorly, with a long grey hair springing from each puncture, the posterior margin smooth. Mesonotum, scutellum, and median segment smooth and shining; a transverse row of large setigerous punctures at the base of the scutellum; the pleuræ rather finely punctured, with long and thin cinereous pubescence on the mesopleuræ. Median segment with very short, fine, oblique striæ along the lateral margins, obliquely sloped posteriorly, the sides of the segment at the base concave, smooth, and shining. Abdomen shining; the segments with a feeble but broadly arched

depression at the apex, sparsely punctured before the depression, the basal third of segments 2-4 smooth and divided by a transverse line from the apical portion of the segment, the petiole of the basal segment a little longer than broad, the apical segment elongate and pointed, smooth and shining. Wings rather short, of about the same length as the abdomen, the stigma situated nearer to the base of the wing than to the apex, the cubital nervure produced a little beyond the apex of the cell and joined at its extremity by a strong scar extending to the margin of the wing.

Black; the mandibles and pronotum bright ferruginous; the apex of the fourth ablominal segment and the whole of the fifth and sixth testaceous red; the tarsi, the anterior tibies, and the tegale ferruginous; the spines of the tibies whitish; the antenne fusc-ferruginous. Wings hyaline,

nervures pale ferruginous.

Length 8 mm.

Hab. Delagoa Bay.

Type in B. M.

This is a small and rather slender species, and the wings, though rather short, are quite sufficient for flight.

# Myzine rufifrons, Fab.

Myzine (Meira) violaccipennis, Cam. Rec. Albany Museum, i. 5, p. 301, is undoubtedly a synonym.

# Myzine dimidiaticornis, Bingh.

Myzine dimidiaticornis, Bingh. Journ. Linn. Soc., Zool. xxv. p. 423 (1896), d.

This is a *Myzine*, and not a *Plesia*, but is distinguished from other males of the genus by the very long pronotum.

#### Myzine binghami, sp. n.

Q. Head rectangular, about half as broad again as long, smooth and shining, with a few scattered punctures on the vertex and above the base of the antennæ; the clypeus transverse and depressed; the antennæ smooth and shining, the scape beneath with long golden hairs; a sulcus between the antennæ reaching more than halfway to the anterior occllus. Pronotum rather narrower than the head, slightly narrowed anteriorly and a little broader than long, nearly as long as the scutellum and median segment combined; the whole thorax shining, with very large and sparse punctures, those on the pronotum setigerous; the propleure shining and very

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sparsely punctured, mesopleuræ very coarsely punctured. Median segment broader than long, steeply sloped posteriorly but not abruptly truncate, finely rugose in the middle, with a short, double, longitudinal carina from the base, the sides obscurely obliquely striated; the metapleuræ shining, with obscure oblique striæ. Abdomen shining, finely and not very closely punctured, the apical segment long and large and almost entirely smooth, the petiole of the basal segment as broad as long. The stigma is a little nearer to the base than to the apex of the wing, the second cubital cell is very small, the height being very much less than the length of the petiole, it is very much contracted, the height being equal to twice the length of the cubital nervure; the first recurrent nervure is received beyond the middle, the second recurrent nervure is slightly curved outwardly in the middle.

Black; the antennæ, mandibles, and intermediate tibiæ and tarsi dark fusco-ferruginous; the anterior tibiæ and tarsi fusco-ferruginous; the spines of the tibiæ white, those of the tarsi fulvous; the two apical segments of the abdomen ferruginous red; a large creamy-white spot on each side near the apical angles of the second and third segments. Wings

fusco-hyaline, nervures fuscous, the stigma black.

Length 10, exp. 14 mm.

the genus.

Hab. Maulmain, Tenasserim (Bingham); August.
This is a true Myzine, and is the most eastern record for

# Plesia (Mesa) disjuncta, sp. n.

3. Clypeus rather large, broadly rounded at the apex, with a median carina from the base almost reaching the apex, opaque and minutely punctured, densely clothed with rather long silver-white pubescence. Front rugose, strongly produced between the antennæ and truncate at the apex, the vertex rather coarsely punctured. Antennæ inserted much further from each other than from the eyes, the scape about equal in length to the second joint of the flagellum, closely and finely punctured and subglobular, the first joint of the flagellum very short and almost concealed in the apex of the scape, the third more than half as long again as the second. Pronotum finely and not very closely punctured, very broadly emarginate anteriorly, the lateral angles very strongly produced; mesonotum and scutellum rather sparsely punctured, the mesonotum with a strong oblique depression on each side, meeting on the posterior margin, and a faint longitudinal sulca above the tegulæ; propleuræ finely and closely punctured, mesopleuræ coarsely rugose. Median segment rugose:

the sides closely punctured, striated at the base, the groove for the posterior femora shining and very strongly transversely striated. Abdomen minutely and closely punctured, with short, thin, white pubescence; the punctures on the apex of the sixth and the whole of the seventh segment large and very sparse; the apical two-thirds of the slender basal segment nodose, the narrow basal third with a longitudinal median sulcus. The second cubital cell is slightly longer than the third on the radial nervure, the first recurrent nervure is received at three-fifths from the base of the second cubital cell, the second (which is slightly curved outwardly in the middle) at one-third from the base of the third cubital cell.

Black; the pubescence white, cinereous on the front; the palpi, the mandibles (except at the apex), the anterior and intermediate tibiae, tarsi, and femora light ferruginous; the spines of the posterior tibiae and the tegulæ testaceous; abdominal segments 2-5 with strong blue tints. Wings hyaline, the apical third of the anterior pair flushed with purple;

nervures black.

Length 18, length of wing 12 mm.

Hab. Sterkfontein, Transvaal (H. P. Thomasset).

Type in B. M.

Probably the male of P. diapherogamia, Sauss.

Specimens from Natal differ in having the apical half of the anterior wings and the apex of the posterior wings strongly fusco-hyaline, flushed with purple, and the blue tints on the abdomen are less developed. This may prove to be the male of *P. ruficeps*, Sm., of which *P. diapherogamia* is scarcely more than a local colour-variety.

#### Plesia (Mesa) adelogamia, sp. n.

?. Clypeus broadly rounded at the apex, deeply and closely punctured at the apex, shallowly and very sparsely at the base, with a carina from the base to the apex. Mandibles shining, with a sparse fringe of long dark fulvous hairs on the lower margin. Scape shining, with a few scattered punctures and a few long fuscous hairs beneath, the first joint of the flagellum shining, the rest opaque. Front closely and very coarsely punctured, without a median sulcus, the tubercles at the base of the antennae smooth and shining; the vertex and the space round the occlli rather sparsely punctured. Pronotum coarsely but not very closely punctured; mesonotum smooth anteriorly, very sparsely punctured on the posterior two-thirds, with two longitudinal sulci on each side; scutellum sparsely punctured, the postscutellum

shining in the middle, with a few minute punctures, opaque at the sides. Propleuræ sparsely punctured, obliquely striated near the lower posterior angle; mesopleuræ coarsely runctured. Median segment finely and shallowly punctured, rugulose, with a shining and shallow sulcus from the base not reaching the apex, rather abruptly truncate posteriorly, the face of the truncation very finely rugose; the sides of the segment finely obliquely striated. Abdomen shining, finely and rather closely punctured, most finely at the base of the segments; the second and third segments marked with a slightly raised transverse line at about one-third from the base; the epipygium finely longitudinally striated and broadly rounded at the apex. Radial cell narrowly rounded at the apex, the second cubital cell about two-thirds of the length of the third on the radial nervure; the first recurrent nervure is received close to the middle of the second cubital cell, the second just beyond the middle of the third cubital cell. The third transverse cubital nervure is oblique and broadly curved outwardly.

Black; the mandibles (except at the apex), the extreme apex of the clypeus, the posterior margin of the head broadly (reaching to the posterior occili), and the pronotum ferruginous red; the tegulæ and the spines of the tarsi and tibiæ testaceous, the latter very pale; the extreme apex of the pygidium fusco-ferruginous. Wings fuscous, the posterior wings paler, the auterior slightly shot with purple; nervures black. Pubescence white, black on the head and

thorax above.

Length 14, length of wing 9 mm.

Hab. Maseru, Basutoland (R. Crawshay).

Type in B. M.
Described from four specimens.

# Plesia (Mesa) hova, sp. n.

Q. Mandibles acute at the apex, shining, and with a fringe of long fulvous hairs on the lower margin. Clypeus broadly rounded at the apex, closely punctured, the apical margin shining and smooth. Front closely and coarsely, vertex sparsely and shallowly punctured, the space round the ocelli smooth and shining; the scape of the antenne is smooth and shining above, finely punctured beneath, with a few dark fulvous hairs; the flagellum is opaque, with the first joint shining. Pronotum coarsely and closely punctured, the anterior truncation smooth and shining, the propleuræ sparsely, the mesopleuræ very coarsely and closely punctured. Meso-

notum smooth anteriorly, punctured rugose posteriorly, the lateral sulci ill-defined; the scutellum sparsely punctured, smooth and shining in the middle at the base. Median segment minutely punctured at the base, more strongly at the apex, the posterior truncation slightly concave, shining, and almost smooth; a narrow and shallow sulcus, bordered on each side by a low carina, from the base of the segment to the base of the truncation, the sides of the segment obliquely striated. Abdomen shallowly and not very closely punctured; the petiole of the basal segment scarcely longer than broad, the epipygium closely and finely longitudinally striated and broadly rounded at the apex. The radial cell is narrowly rounded at the apex, the second cubital cell is a little more than half as long as the third on the radial nervure; the first recurrent nervure is received close to the middle of the second cubital cell, the second at one-quarter from the apex of the third cubital cell.

Black; the head rufo-ferruginous, the flagellum fusco-ferruginous, the apex of the mandibles black. The spines of the tibie and tarsi white, some of those on the tarsi testaceous, the tegulæ testaceous at the apex. Wings fuscous, flushed with blue, subhyaline at the base; nervures black.

Length 12-14, length of wing 8-9 mm.

Hab. Tamatave, Madagascar.

This will almost certainly prove to be the female of *P. nodosa*, Guér. Allied to *P. atopogamia*, Sauss.

Type in B. M. (ex coll. Turner).

A specimen from Betsileo, Madagascar, has the pronotum, the middle of the mesonotum, the apex of the scutellum, and the tarsi red, and the wings dark fulvo-hyaline. This appears to be a colour-variety only, but may possibly prove to be distinct.

#### Plesia (Mesa) erythropoda, sp. n.

?. Clypens slightly convex towards the middle and subcarinate, shining, very finely punctured. Mandibles acute at the apex, with a fringe of fulvous hairs on the lower margin. Head shining, rather sparsely punctured; the front between the antenna bilobed, divided by a deep longitudinal sulcus which is shallowly continued halfway to the anterior ocellus, the space round the ocelli almost smooth. Scape shining, with a few long fulvous hairs beneath, smooth above; the second joint of the flagellum nearly half as long again as the first and much stouter. Pronotum shorter than the median segment, rather closely punctured, some of the punctures confluent longitudinally but not very deep, the pubescence

rather long but sparse; the lateral lobes of the mesonotum sparsely punctured, the middle shining, with two or three scattered punctures; a deep sulcus on each side, slightly convergent posteriorly; the anterior margin smooth and shining. Scutellum and postseutellum smooth and shining, with a few small and scattered punctures; the propleuræ obscurely striated at the base, almost smooth at the apex, the mesopleuræ closely punctured. Median segment opaque, very finely punctured, rugulose, with a narrow sulcus, bordered by a low carina on each side, from the base, gradually becoming narrower and shallower to the base of the oblique posterior slope. Abdomen shining, rather sparsely punctured, very slightly narrowed at the base; the petiole of the basal segment as broad as long, the apical segment finely and closely longitudinally striated. The sides of the median segment are closely obliquely striated.

Black; the mandibles, palpi, and legs (except the coxe) bright ferruginous; the tegulæ testaceous, the antennæ fuscous beneath. Wings hyaline, nervures ferruginous. The extreme apex of the epipygium rufo-testaceous. The radial cell is rounded at the apex; the second cubital cell is about two-thirds of the length of the third on the radial nervure; the first recurrent nervure is received at the middle of the second cubital cell, the second just beyond the middle of the third. The pubescence on the whole insect is very

sparse and grevish.

Length 11-12, length of wing 7 mm.

Hab. Lake Ngami.

Type in B. M.

Described from two specimens.

# Plesia (Mesa) capensis, Lepel.

The figure showing the neuration of the wing proves that this is not a *Tiphia*. I cannot identify it as having been subsequently described, though it must come very near *P. hottentota*, Sauss.

#### Plesia (Mesa) innotata, sp. n.

Q. Clypeus short and broad, punctured at the base, the apical margin slightly depressed and smooth; the apex of the labrum with a fringe of long, stiff, golden hairs. Mandibles smooth and shining, with a very sparse fringe of long golden hairs on the outer margin. Head strongly punctured,

closely on the front, where some of the punctures are longitudinally confluent, more sparsely on the vertex, the front between the antennæ deeply emarginate, with a narrow longitudinal suleus nearly reaching the anterior ocellus. Scape shining, finely and rather closely punctured, smooth at Pronotum shorter than the median segment, deeply and closely punctured, almost reticulate; mesonotum very sparsely punctured, with two longitudinal sulci on each side; the scutellum rather more closely punctured, the postseutellum very finely and closely punctured; propleuræ closely punctured, obscurely obliquely striated posteriorly; mesopleuræ coarsely punctured. Median segment finely punctured, rugose, with a rather broad sulcus from the base bordered by low carinæ, obliquely sloped posteriorly. Abdomen shining, sparsely punctured, more closely on the fourth and fifth segments, the apical segment strongly longitudinally The sides of the median segments closely obliquely striated. The first recurrent nervure is received at the middle of the second cubital cell, the second at two-thirds from the hase of the third cubital cell; the second cubital cell is produced on the cubital nervure towards the base and narrowly truncate at the extremity; the third cubital cell is half as long again as the second on the radial nervure; the third transverse cubital nervure is oblique, slightly curved outwardly near the cubital nervure; the radial cell is narrowly separated from the costa and narrowly rounded at the apex.

Black; the pubescence very sparse and white, thicker on the legs, which are punctured, the spines of the legs white; the lateral margins of the abdominal segments very narrowly

testaceous. Wings hyaline, nervures black.

Length 13 mm.

Hub. East Loangwa district, N.E. Rhodesia, 2400 feet (S. A. Neave); February.

Type in Oxford University Museum.

Nearest to P. hottentota, Sauss., and P. copensis, Lep., but differs from the former in neuration and the colour of the antenna, from the latter (which is very poorly described) in the colour of the wings and pubescence.

# Plesia (Mesa) madraspatana, Sm.

Myzine madraspatana, Sm. Cat. Hym. B. M. iii. p. 72. n. 11 (1855), ♀. Myzine violaccipennis, Cam. Mem. Manchester Phil. Soc. xlii. xi. p. 21 (1898), ♀.

If there are two species as Cameron states, he has identified them wrongly; the characters he gives for madraspatana, Sm., do not exist in the type. Cameron's description is applicable to typical madraspotana, except that the type has the clypeus carinated. I have seen a specimen from Poona.

This species will probably prove to be the female of Myzine

dimidiata, Guér.

# Plesia (Mesa) dimidiata, Guér.

Myzine dimidiata, Guér. Dict. pitt. hist. nat. v. p. 584. n. 17, 3. Methoca orientalis, Sm. Cat. Hym. B. M. iii. p. 66. n. 3 (1855), 3 (nec Smith, 1875).

Smith's type is not marked in the B.M., but his description agrees well with Guérin's species; and in describing *Methoca orientalis* in 1875, he states that it is the first species of the genus recorded from India. He has made a similar mistake in describing *Methoca mandibularis* (1869, Trans. Ent. Soc. London), which is also a *Plesia*.

# Plesia (Mesa) purpureipennis, sp. n.

2. Clypeus deeply but sparsely punctured, with an indistinct carina from the base, broadly subtruncate at the apex, the apical margin smooth and shining. Mandibles with a sparse fringe of fulvous hairs on the outer margin; scape shining and sparsely punctured, smooth at the apex, with a few long fulvous hairs beneath; the flagellum opaque, the first joint shining and sparsely punctured. Front coarsely, vertex sparsely and rather more finely punctured, a large space round the anterior ocellus smooth and shining. Pronotum and scutellum very coarsely punctured rugose; mesonotum sparsely punctured, with two sulci on each side, the inner sulcæ broad and converging towards the posterior margin. Median segment very finely rugulose, with a broad transversely striated sulcus from the base to the apex, the sides of the sulcus raised and forming carinæ, the posterior truncation of the segment shining, sparsely and shallowly marked with large punctures, the sides of the segment obliquely striated. Propleuræ rugose striated posteriorly, mesopleuræ exceedingly coarsely punctured. Abdomen shining, rather sparsely punctured, most strongly on the basal segment, very sparsely on the second; the epipygium finely and closely longitudinally striated, rounded at the apex, the hypopygium narrowly truncate at the apex. The second cubital cell is very little shorter than the third on the radial nervure, the first recurrent nervure is received close to the middle of the second cubital cell, the second at two-thirds from the base of the third cubital cell.

Black; the extreme apex of the pygidium testaceous; the pubescence greyish, pale fulvous on the sides of the abdomen; the spines of the tibre and tarsi pale ferruginous. Wings dark fuscous, glossed with purple; nervures black.

Length 16-18 mm.

Hab. Entrance Island, China (J. J. Walker). Type in B. M. Described from two specimens.

This seems to be the Chinese form of *P. madraspatuna*, Sm., from which it differs by the entirely black colour of the abdomen. The second cubital cell is also rather longer on the radial nervure.

# Plesia (Mesa) mandibularis, Sm.

Methoca mandibularis, Sm. Trans. Ent. Soc. London, p. 301 (1869), J.

This is probably the male of the last-described species. It is very near *dimidiata*, Guér., from which it may be distinguished by the paler colour of the wings and the rather shorter clypeus, also by the more distinct sulcus on the median segment.

# Plesia (Mesa) opacifrons, sp. n.

2. Clypeus short, very broadly truncated at the apex, the base punctured, the apex broadly depressed transversely, opaque and smooth. Scape smooth above, sparsely punctured beneath and with a few long fulvous hairs; flagellum opaque, the first joint smooth and shining. Front opaque, almost smooth, with a few large scattered punctures, the interantennal prominence strongly bilobed, divided by a suleus which reaches more than halfway to the anterior ocellus; vertex shining, finely and very sparsely punctured, the space round the ocelli smooth. Thorax shining, sparsely and rather finely punctured; the mesonotum with two longitudinal sulci on each side, the inner sulci not very strongly convergent posteriorly. Propleuræ closely and finely punctured, mesopleuræ more strongly punctured. segment closely obliquely striated on the sides; the dorsal surface very closely and finely punctured, some of the punctures confluent, with a smooth shining space on each side near the middle; two parallel carinæ from the base not reaching the apex, very near together, the space between them finely rugose; the surface of the oblique posterior truncation finely aciculate, with scattered shallow punctures. Abdomen shining, evenly, but not very closely punctured; the second segment almost smooth; the anterior truncation

of the basal segment slightly concave; the epipygium subopaque, rather sparsely punctured, some of the punctures confluent longitudinally near the apex. The second cubital cell is full three-quarters as long as the third on the radial nervure, the radial cell is very narrowly separated from the costa at the apex, the second recurrent nervure is received at three-fifths from the base of the third cubital cell.

Black; the pubescence grey and very sparse; the apex of the pygidium narrowly testaceous; the spines of the tibiæ white, those of the tarsi very pale ferruginous. Wings fusco-hyaline, flushed with purple, darkest towards the apex;

nervures black.

Length 12 mm.

Hab. Salween Valley, Tenasserim (Bingham); July. Type in B. M. (ex. coll. Bingham).

#### Plesia (Mesa) ustulata, sp. n.

2. Clypeus very finely and closely punctured; the head punctured, finely and sparsely on the vertex and round the ocelli, closely and coarsely on the front, a shallow longitudinal sulcus between the antennæ reaching halfway to the anterior ocellus; the scape shining and punctured, with sparse, pale, fulyous pubescence beneath, the flagellum except the basal joint opaque. Pronotum rather deeply, but not very closely punctured; mesonotum shining, very sparsely punctured, almost smooth on the disc, with two longitudinal sulci on each side, the outer one very shallow and indistinct; the scutellum shining and very sparsely punctured; propleura punctured rugulose, mesopleuræ closely and not very coarsely punctured. Median segment very finely and closely punctured, with a broad groove from the base to the base of the oblique posterior slope, which is not abruptly divided from the dorsal portion of the segment, the sides closely obliquely Abdomen shining, finely punctured, sparsely on the two basal segments, more closely on the others; the epipygium finely punctured at the base, finely longitudinally striated before the apex, which is broadly rounded, the apical margin rather broadly smooth; the petiole of the basal segment broader than long. The first recurrent nervure is received at the middle of the second cubital cell, the second. which is broadly but not very strongly curved outwardly, a little beyond the middle of the third cubital cell. The second cubital cell is long on the radial nervure, slightly longer than the third; the second and third transverse cubital nervures oblique, very slightly bent close to the cubital nervure; the radial cell obliquely truncate at the apex.

Black; the mandibles, flagellum, and apex of the hypopygium dull fusco-ferruginous; the apex of the epipygium and the tegulæ testaceous; the spines of the tibiæ and tarsi whitish. Wings pale yellowish brown, fusco-ferruginous in the radial cell, nervures dark fuscous.

Length 12 mm.

Hab. Yunzalin Valley, Tenasserin (Bingham); November. Type in B. M.

# Plesia (Mesa) extensa, sp. n.

3. Clypeus convex and subcarinate in the middle, slightly advanced to the apex and very feebly and narrowly emarginate, finely punctured and clothed with white pubescence. Front punctured-rugose, vertex sparsely and rather shallowly punctured, the prominence between the antennæ bilobed, widely but not deeply emarginate at the apex. Scape very finely punctured, short and swollen, the first joint of the flagellum concealed by the apex of the scape, the second not as long as the scape, the third half as long again as the Pronotum shining, finely and not very closely punctured, narrowed anteriorly, the posterior margin arched; mesonotum and scutellum shining and sparsely punctured, the mesonotum with two sulci on each side, the two inner sulci deep and converging towards the posterior margin. Median segment coarsely transversely rugose; propleurae very finely, mesopleuræ more coarsely punctured. Abdomen shining, finely and sparsely punctured, slender and elongate; the basal segment smooth, fully as long as the second and third combined, the basal half very narrow and depressed, the apical half nodose, constricted at the apex; the second segment gradually widered from the base, a little longer than the third; the epipygium with a longitudinal carina. The third cubital cell is about one-quarter as long again as the second on the radial nervure; the first recurrent pervure is received just beyond the middle of the second cubital cell. the second at two-fifths from the base of the third cubital cell.

Black; the mandibles except at the apex, the extreme apex of the interantennal prominence, a short, narrow, transverse line on each side at the apical angles of the four basal abdominal segments, the basal joints of the tarsi, the anterior tibiae, and the base of the posterior and intermediate tibiae pale yellow, the apical joints of the tarsi fuscous. Wings very pale fusco-hyaline, nervures fuscous, the tegulæ testaccous.

Length 12 mm.

Hab. Maymyo, Burma, 2000 ft. (Bingham); September. Type in B. M. (ex coll. Bingham). Nearest to petiolata, Sm.

# Plesia (Mesa) petiolata, Sm.

Myzine petiolata, Sm. Cat. Hym. B. M. iii, p. 72. n. 10 (1855), ♂. Myzine ceylonica, Cam. Ann. & Mag. Nat. Hist. (7) v. p. 18 (1900), ♀.

A pair taken in coitu by Mr. Lefroy at Pusa, Bengal, in June.

The female is very near fuscipennis, Sm., but in that insect the median segment is abruptly truncate, leaving a welldefined apical margin, which is not the case in petiolata; the mesonotum also is much more strongly punctured in fuscipeunis, as noticed by Cameron.

#### Plesia (Mesa) hortata, Nurse.

Myzine hortata, Nurse, Journ. Bombay Nat. Hist. Soc. xiv. p. 81 (1902), ♀.

Hab. Deesa (Nurse); Pusa, Bengal (Lefroy).

#### Plesia dichroa, Perty.

Meria dichroa, Perty, Delect. anim. artic. Brasil. p. 139, pl. xxvii. fig. 13 (1833), ♀.
Plesia dorsalis, Lep. Hist. nat. Ins. Hym. iii. p. 576 (1845), ♀.

As I have not seen the types I cannot be absolutely certain as to the identity of these insects, but judging from the descriptions I have little doubt that they may be referred to the same species.

#### Plesia univittata, sp. n.

Q. Clypeus short, punctured, sparsely clothed with cinereous pubescence, with a faint, longitudinal, median carina. Mandibles subacute at the apex, with a sparse fringe of fulvous hairs on the outer margin. Front deeply and closely punctured, vertex sparsely punctured, cheeks smooth and shining. Pronotum as broad as the head, slightly emarginate anteriorly, deeply and rather closely punctured, the sides very delicately striated. Mesonotum and scutellum shining, with large sparse punctures. Median segment opaque, sparsely punctured, the sides finely striated, shorter than the scutellum, the angles rounded, truncate posteriorly and delicately rugulose. Abdomen shining, very shallowly

punctured; the first segment truncate anteriorly, about onequarter narrower at the apex than the second segment. Epipygium longitudinally striated, rounded at the apex; hypopygium subtruncate at the apex. The first joint of the posterior tarsi is about twice as long as the second, spinose on the outer margin from the base to the apex and with a

comb of short spines beneath.

Black; the abdomen with faint blue reflections; the inner margin of the eyes very narrowly, the postscutellum, a longitudinal mark on each side of the median segment near the apex, a broad band strongly emarginate posteriorly with a small black spot on each side of the emargination on the first ab lominal segment and a narrow transverse band close to the base of the third segment yellow; the apex of the epipygium very narrowly testaceous; the spines of the tibia whitish. Wings pale fusco-hyaline, tinged with violaceous, a much darker band broadening to the apex along the costa, nervures fuscous. First recurrent nervure received by the second cubital cell at three-fifths from the base, the second received by the third cubital cell at two-fifths from the base. Second cubital cell very long, more than half as long again on the cubital as on the radial nervure, one-third longer on the radial nervure than the third cubital cell and nearly twice as long on the cubital nervure. The third cubital cell is rhomboidal, broader than long, the third transverse cubital nervure very slightly arched, joining the radial cell at its extreme apex. & unknown.

Length 16 mm.

Hab. Rio Grande do Sul.

Type in B. M., received from Dr. Ihering.

Allied to P. dichroa, Perty.

#### Plesia andina, sp. n.

Q. Clypeus very closely punctured, raised in the middle into an ill-defined, longitudinal carina and very broadly rounded at the apex. Front closely and coarsely punctured, the vertex more sparsely punctured, the area round the anterior occllus almost smooth. The posterior occlli are further from the eyes than from each other and a little further from each other than from the anterior occllis; they are situated on the inner margin of a small depression. The inner margin of the eyes very broadly and shallowly emarginate. Scape very sparsely punctured beneath, with a few pale fulvous hairs, more closely punctured above; as long as joints 2-4 of the flagellum combined. Mandibles with a

sparse fringe of pale fulvous hairs on the basal half of the outer margin. Pronotum a little broader than the head, nearly three times as broad as long, rather sparsely punctured. Mesonotum and scutellum very sparsely punctured, the mesonotum with two longitudinal sulci on each side, the inner sulci slightly more convergent posteriorly than the outer. Mesopleuræ strongly, but not very closely punctured; the scutellum not quite as long as the mesonotum. Median segment finely rugose, punctured at the base, the sides of the segment finely striated; shorter than the mesonotum, steeply sloped posteriorly, the posterior surface finely obliquely striated and covered with short cinereous pubescence. Abdomen sparsely and rather finely punctured, the segments smooth at the base, the second and third segments with a slightly raised transverse line near the base; the first segment truncate at the base, the dorsal surface not more than half as long as the second segment. Epipygium longitudinally striated, rounded at the apex; the hypopygium projecting beyond the epipygium and narrowly truncate at the apex. The intermediate and posterior tibiæ very broad, flattened on the outer surface and very coarsely rugose, the margins closely serrated. The basal joint of the posterior tarsi is more than twice as long as the second joint, armed with two or three spines before the apex and with a comb of The first joint of the short, closely-set spines beneath. anterior tarsi is strongly emarginate at the base beneath. Black; the mandibles, a spot at the apex of the scape, a spot on the tegulæ, the apical joints of the tarsi and the apex of the pygidium dark fusco-ferruginous, the spines of the tibiæ whitish. Wings deep fulvo-hyaline, the apical third fuscohyaline, dark fuscous in the third cubital cell and beyond the apex of the radial cell; nervures ferruginous. The first recurrent nervure is received by the second cubital cell at onethird from the apex, the second just before the middle of the third cubital cell. The second cubital cell is as long as the third on the radial nervure and nearly twice as long on the cubital nervure as on the radial. The third cubital cell is more than half as long again on the cubital as on the radial nervure and half as broad again at the apex as at the base. & unknown.

Length 14-17 mm.

Hab. Mendoza, Argentina (December-March).

Described from three specimens purchased from H. Rolle.